

Claims

1. In a storage area network (SAN) of the type having

a digital processor in communication with one or more storage devices,

a plug-and-play manager that generates an event in response to a change in status of at least one of the storage devices,

the improvement comprising

one or more processes executing on the digital data processor, the one or more processes referencing at least a selected one of the storage devices using a previously assigned logical identification,

at least a selected one of the processes responding to a said event generated by the plug-and-play by effecting querying for information the storage device, or an interface thereto, with respect to which the event was generated, and generating from that information the logical identification for that storage device.

2. In the SAN of claim 1, wherein

the plug-and-play manager generates, along with the event, a physical identification of the storage device with respect to which the event was generated,

the further improvement wherein

the selected process references the physical identification in effecting querying of the storage device or an interface thereto.

3. In the SAN of claim 1, the improvement wherein the event signifies any of coupling or decoupling of the storage device with respect to which the event was generated for communication with the digital data processor.

4. In the SAN of claim 1, wherein

the plug-and-play manager generates, along with the event, a reference to a data structure containing data regarding the storage device with respect to which the event was generated,

the further improvement wherein

the selected process parses the data contained in the object referenced by the event to determine an address of the storage device.

5. In the SAN of claim 4, the further improvement wherein the selected process references the address in effecting querying of the storage device or an interface thereto.

6. In the SAN of claim 5, wherein

the digital data processor communicates with the one or more storage devices via a communications port driver,

the further improvement wherein

the selected process queries the driver retrieves for the information based on the address.

7. In the SAN of claim 4, the further improvement wherein the digital data processor is coupled for communications with one or more storage devices via a SCSI bus and via an adapter.

8. In the SAN of claim 7, the further improvement wherein the data contained in the object includes a name of the adapter, a port number, a path number, a target number and a logical unit number for the storage device with respect to which the event was generated.

9. In the SAN of claim 8, the further improvement wherein the selected process extracts from the object the port number, the path number, the target number and the LUN number of the storage device with respect to which the event was generated.

10. In the SAN of claim 9, the further improvement wherein the selected processes effects transmission of a query to the storage device to retrieve SCSI inquiry data.

11. In the SAN of claim 4, the further improvement wherein the selected process opens a handle to the object to obtain the port number, the path number, the target number and the LUN number

12. A storage area network (SAN), comprising:

at least one digital data processors in communication with one or more storage devices each having a physical identifier, the digital data processor having a plug-n-play manager that generates an event in response to a change in status of at least one of the storage devices, the event referencing a physical identifier of that storage device,

a manager in communication with the digital data processors, the manager assigns a logical identifier to each of the storage devices,

an agent executing on the digital data processor in communication with the manager to receive the logical identifiers,

a process executing on the digital data processor that responds to a said event generated by the plug-and-play manager to effect querying the storage device having the physical address associated with the event, or an interface to that storage device, for information regarding the logical identifier of that storage device.

13. The SAN of claim 12, wherein the digital data processor includes a communication port for communicating with the storage devices and a port driver providing a software interface to the communication port, the agent communicating the logical identifiers of the storage devices to the port driver.

14. The SAN of claim 13, wherein the event generated by the plug-n-play manager references an object containing information regarding the physical address of the storage device.

15. The SAN of claim 14, wherein the process executing on the digital data processors parses the information contained in the object referenced by the plug-n-play manager to discern the physical address of the storage device.

16. The SAN of claim 15, wherein the process queries the port driver regarding logical identifier of a storage device having the physical address discerned from the object referenced by the plug-n-play manager.

17. The SAN of claim 16, wherein the port driver utilizes the logical identifiers received from the agent to determine the logical identifier of the storage device having the physical address discerned from the object referenced by the plug-n-play manager.

18. In a storage area network (SAN) comprising at least a digital data processor in communication with one or more storage devices each having a physical address and an assigned logical address, the digital data processor having a plug-n-play manager that generates an event

in response to a change in status of at least one of the storage devices, the event referencing an object containing information regarding the physical address of that storage device, a method for obtaining the logical address of that storage device, comprising:

    parsing the data contained in the object referenced by the event to determine the physical address of the storage device with respect to which the event was generated, and

    effecting a query of any of the storage device having the physical address, and an interface thereto, for information regarding the logical identifier of that storage device.

19. The method of claim 18, wherein the event signifies any of coupling or de-coupling of a storage device to or from the SAN.